Monson, MA

Stormwater Pollution Prevention Plan (SWPPP) for the Monson Highway Department (MHD) Facility Regulated by the MS4 Permit

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SECTION 1 – Introduction

This Stormwater Pollution Prevention Plan[1] (SWPPP) for the Monson Highway Department (MHD) facility has been developed by the Town of Monson to address the requirements of the United States Environmental Protection Agency (USEPA) 2016 National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) in Massachusetts, hereafter referred to as the 2016 Massachusetts MS4 Permit.

The 2016 Massachusetts MS4 Permit requires that each permittee, or regulated community, address six Minimum Control Measures. These measures include the following:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination Program
4. Construction Site Stormwater Runoff Control
5. Stormwater Management in New Development and Redevelopment (Post Construction Stormwater Management); and
6. Good Housekeeping and Pollution Prevention for Permittee Owned Operations.

This MHD SWPPP accomplishes these requirements by:

- Providing an inventory of the materials and equipment at the MHD facility that have the potential to cause stormwater pollution, and identifying locations where these materials are stored;
- Describing how stormwater is managed at the facility, including: engineered storm drain system conveyance; on-site pretreatment, treatment and infiltration systems; and discharges to surface water directly from the site;
- Reviewing activities that occur at the facility that represent a potential for stormwater pollution;
- Describing the Best Management Practices (BMPs) that will be implemented at the facility to reduce, eliminate and prevent the discharge of pollutants to stormwater;
- Identifying the employees responsible for developing, implementing, maintaining, and revising, as necessary, this SWPPP;
- Establishing a schedule and description of site inspections to be conducted at the facility to determine if the SWPPP is effective in preventing the discharge of pollutants; and
- Serving as a tool for the facility employees, including a place to maintain recordkeeping associated with these requirements.

[1] This SWPPP was adapted from the Central Massachusetts Regional Stormwater Coalition example on the MA EPA website.

SECTION 2 – Detailed Facility Assessment

2.1 Facility Summary

The Monson Highway Department Facility is located at 200 Main St and is owned and operated by Town of Monson. The Locus Map in **Figure 2-1** shows the location of the facility within the Town.

The Highway Department is primarily responsible for activities at, and maintenance of, the facility.

2.2 Site Inspection

The site inspection associated with the development of this SWPPP was completed on December 12th, 2019. The inspection was conducted by John Morrell and Ben Murphy (MHD), accompanied by two consultants from AECOM.

During the site inspection, information related to activities at the site, vehicles stored at the site, fueling operations, material storage, transport of oil and other materials, and spill history was gathered.

2.3 Pollution Prevention Team

A Pollution Prevention Team for the highway facility has been formed, and assigned the task of developing, implementing, maintaining, and revising as necessary, the SWPPP for this facility. Listed below are Pollution Prevention Team members and their respective responsibilities.

Responsibilities assigned to one or more members of the Pollution Prevention Team include:

- Implementing, administering and revising the SWPPP
- Regularly inspecting stormwater control structures
- Conducting stormwater training
- Recordkeeping

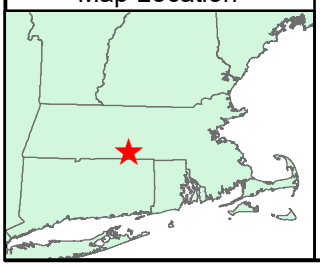
Leader: John Morrell
Title: Highway Department Supervisor
Office Phone: (413) 267-4100
Cell Phone: NA

Responsibilities: Considers all stages of plan development, inspections, and implementation; coordinates employee training programs; maintains all records and ensures that reports are submitted; oversees sampling program. Responsible for certifying the completeness and accuracy of the SWPPP.

Member: Ben Murphy
Title: Tree Warden
Office Phone: (413) 267-4100
Cell Phone: (413)-335-7492

Responsibilities: Implements the preventative maintenance program; oversees good housekeeping activities; serves as spill response coordinator; conducts inspections; assists with employee training programs; conducts sampling/visual monitoring. Maintains spill kits at the MHD.

Map Location



Town of Monson
Highway Department
Monson, MA

0 500 1,000 2,000 3,000 4,000 5,000 6,000 Meters

0 2,500 5,000 10,000 15,000 20,000 Feet

AECOM

LOCUS MAP

Figure 2.1

June 2020

Project #: 60437567

G:\GIS_Data\work\Monson\Locus Map for SWPPP.mxd

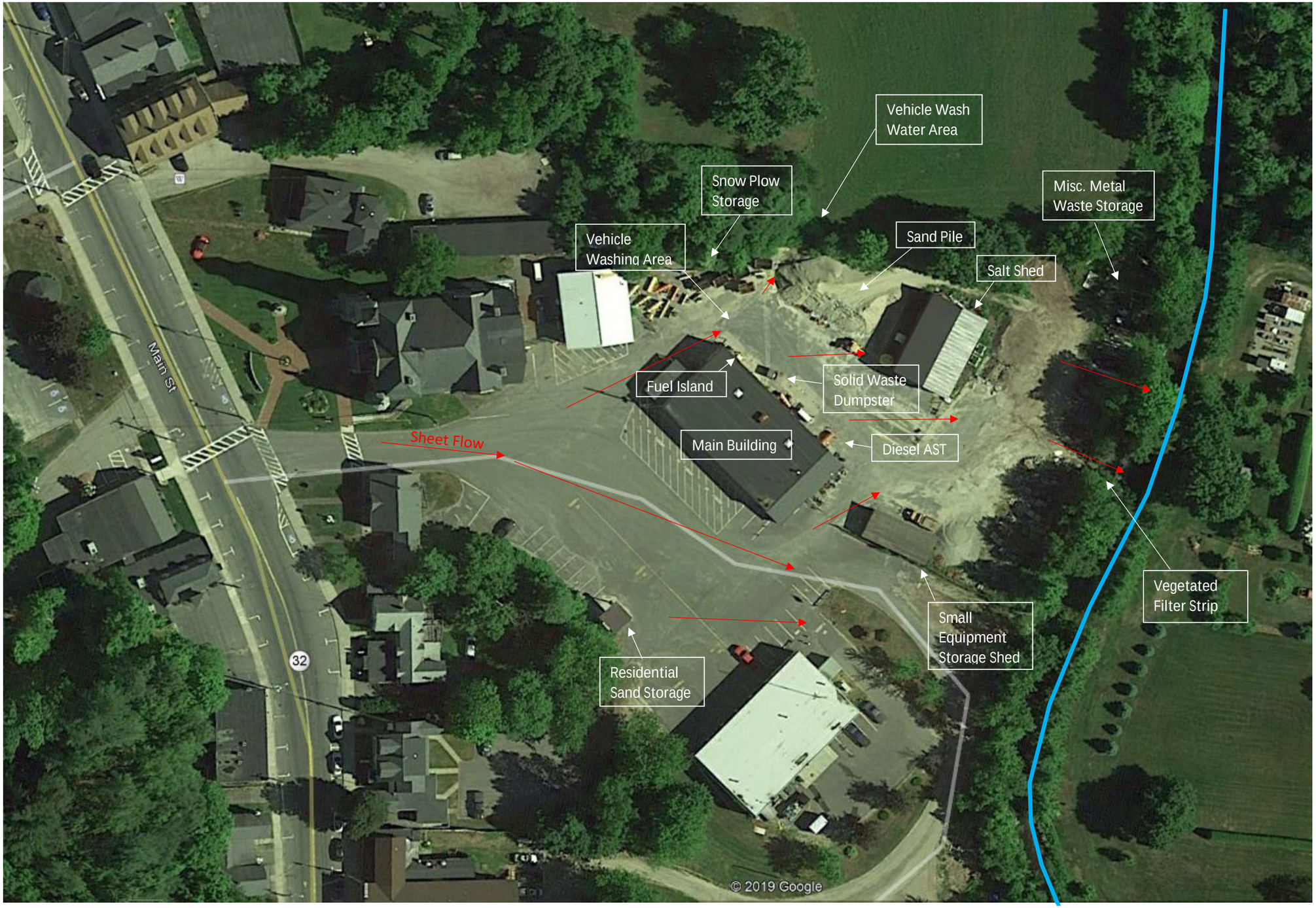
2.4 Facility Description

The primary purpose of the Highway Department is to maintain and repair all town owned roads and bridges to provide safe passage on town streets and town owned properties. The facility is responsible for storing materials and vehicles associated with these tasks. Activities at the site are described in **Section 2.7**

The facility covers approximately 2.5 acres and contains the structures and other features shown on the Site Map (**Figure 2-2),** and/or described in detail in the following sections. Components shown on the site map include:

- A main building (that houses the highway department administrative offices, a garage for service vehicles and large equipment, and storage for fuels)
- A storage garage (for tools, signs, barricades, cement mixer, smaller equipment)
- A salt shed
- A separate open-air storage containment area for public access sand
- Location of the engineered drainage system, including ditches, and treatment BMPs
- Direction of surface water flow
- Vehicle washing areas
- Vehicle fueling areas
- Aboveground storage tanks (outdoor)
- Materials stockpiles
- Waste disposal areas

Figure 2-2. Monson Highway Department Site Map



Legend

- Sheet Flow
- Chicopee Brook

- Main Building
- Sale Shed
- Sand Pile
- Fuel Island
- Vehicle Washing Area
- Residential Sand Storage
- Small Equipment Storage
- Solid Waste Dumpster
- Snow Plow Storage
- Miscellaneous Metal Waste Storage
- Diesel Above Ground Storage Tank (AST)
- Vehicle Wash Water Area
- Vegetated Filter Strip

2.5 Facility Structures

Vehicle Storage and Maintenance

Buildings at the MHD site are used to provide Monson personnel with heated, covered areas in which to complete minor maintenance, oil changes and preparation of vehicles, equipment and tools for use at locations around the Town.

The Highway Department shares a parcel of Town-owned land with the Fire Department and Water and Sewer Department; However, this SWPPP does not include Fire Department activity. The MHD main facility building is located approximately 100 yards from Main Street at the northern portion of the property. Activities in this structure include administrative tasks, storage of all highway department vehicles, vehicle maintenance, and chemical and waste oil storage. The main building contains one floor drain, which runs horizontally along the center of the garage floor. Discharge from the drain empties into an oil/water separator.

Maintenance and Storage Buildings

Carpentry, electrical, and minor maintenance activities are completed in the main facility building. Latex paint, spray paint, and similar products are stored in the main building on the main level and mezzanine. The mezzanine contains no floor drains and is open to the main garage. All potentially flammable materials are properly stored separately in flammable materials storage cabinets.

Small equipment, signage, and tools are stored in the small equipment storage shed, located just south east of the main building. The storage shed contains no floor drains and is fully enclosed.

Vehicle Wash Bays or Recycling Systems

The MHD maintains a vehicle wash bay just outside the main building (northwest side). Wash water flows into an adjacent field. During inclement weather vehicles are washed inside the garage, and the wash water flows to the existing floor drain. The floor drain runs through the center of the building and discharges into an oil-water separator in a tight tank, located under the north side of the building. The oil-water separator is inspected on a regular basis and emptied as required.

Storage of Deicing Materials

Road salt at the MHD facility is stored in a salt shed. This building is covered and enclosed on three sides; the salt is fully contained within the building. Good housekeeping measures are employed to minimize the exposure of salt to wet weather during the removal of stored material from the shed. These includes sweeping the loading area or adjacent paved surfaces on a regular basis. Road sand is stored outside, immediately adjacent (northwest) to the salt shed (Figure 2-2). The sand pile is uncovered and contains a 10% addition of salt to prevent freezing.

Storage of Road Deicing Equipment

The MHD utilizes a number of salt/sand spreaders and snow plows on its vehicles to adequately maintain the town roads. These pieces of equipment are stored outside, north of the main building (Figure 2-2); the vehicles used with these pieces of equipment are stored inside the main building.

Administrative Buildings

The MHD Administrative office is located within the main building, and includes administrative space, office space, and a break room.

2.5.1 Additional Site Features

Aboveground Storage Tanks

A single aboveground storage tank (AST) at the MHD facility is used for storage of fuel for heating oil, as depicted in **Figure 2-2**. This tank holds a maximum of 1,000 gallons and is located behind the main building on the northeast side for storage of diesel fuel. This AST is not covered and currently has no secondary containment, but has two bollards to protect it from farm.

In order to satisfy permit pollution prevention requirements, it is recommended that the MHD replace this tank and install some form of secondary containment for this tank.

Fuel Islands

An uncovered fuel station containing single fuel pumps for diesel fuel and gasoline is located at the northwest portion of the property, and is used on a 24-hour basis for fueling all MHD vehicles. The island is not covered. Access to these fuel pumps is limited to Town employees and is secured with a security key pad in which users must specify an employee PIN and vehicle ID.

Emergency Generators

A Generac emergency generator located at the northeast portion of the facility provides backup power to the facility during outages. The generator is fully enclosed and has 110 percent containment for its 100-gallon diesel day tank. The generator is operated briefly each week for maintenance purposes, but fueled bi-annually.

Oil/Water Separators

There is one oil/water separator at the MHD facility. The oil/water separator is located adjacent (northwest) to the MHD main building. This pretreatment structure has a cleanout manhole and is pumped out on a regular basis as needed. The Highway Department is responsible for contracting this work and maintains records on the pump out activities. This oil/water separator provides treatment of the flow captured in the main building floor drains.

Solid Waste Management

The Town maintains one dumpster at the northeast portion of the property directly behind the main building. This dumpster is kept closed when not in use. No uncontained debris was observed during the December 2019 facility inspection. The single solid waste dumpster is used by the MHD, the Fire Department, and the Water Department, and is emptied weekly. Due to leakage noticed by staff, the previous dumpster was replaced in 2019.

Materials for Use by Residents

The Town maintains an open structure for storage of sand for use by Monson residents. This storage structure is located in the southwest portion of the property and is not enclosed, but is covered by a roof.

Parking Areas

There are approximately14 designated parking areas at the MHD, each of which is an impervious surface. These parking lots are used primarily for visitors to the Highway Department, Town-owned cars for daily use by MHD employees, and employees' personal vehicles; Highway Department trucks and/or heavy equipment are not kept in this parking lot.

2.6 Site Drainage

The MHD occupies the same property as the Water and Fire Department. The stormwater runoff from the shared parking lot flows overland through the MHD facility property, before generally discharging to Chicopee Brook. There is no subsurface drainage system or catch basins on the MHD site.

Sheet Flow

The majority of the MHD site is impervious, with pavement extending from the facility entrance to the southern edge of the salt shed (Figure 2-2). The area surrounding the salt shed, including the sand pile, is unpaved (generally hard packed soil). As indicated on Figure 2-2, the majority of surface runoff from the site flows in an easterly direction, towards a vegetated slope, before discharging to Chicopee Brook. Flow to the brook is directed through two partially graveled drainage swales. A smaller portion of the MHD site contributes runoff to the north, towards a vegetated berm and an open grassed field.

During the December 2020 site visit, sediment build up was observed in the two drainage swales discharging to Chicopee Brook. It is recommended that the MHD stabilize the unpaved area upstream of these swales with a layer of crushed stone or gravel. This will reduce sediment deposition in the swales during wet weather events.

Engineered Drainage

Engineered drainage at the Highway Department includes a roof downspout into an outdoor drain that directs stormwater through a 12-inch pipe into a gravel swale discharging to a grassy area north of the site. Maintenance of this drainage structure, including sediment removal, is completed by the Highway Department. All other flow is directed by sheet flow as described above.

2.6.1 Receiving Waters

The final point of discharge for stormwater from this site is Chicopee Brook. The brook has been categorized as a 303(d) List (Impaired) surface water. The impairment of this river, assigned the unique identifier MA36-21, is considered a Category 5, meaning that more than one designated use is impaired and that a TMDL will be required.

Impairments of this water body are shown in **Table 2-1**, below.

Table 2-1. Impaired Waters Receiving Drainage from the Monson Highway Department

Water Body Name	ID	Category	Impairment(s)
Chicopee Brook	MA36-21	5	Escherichia coli

The types of impairments documented for this surface water body are related to “Headwaters, east of Peaked Mountain, Monson (through Chicopee Brook Pond, formerly segment MA36031) to mouth at confluence with Quaboag River, Monson.” The activities and stored materials at the Highway Department do not have the potential to affect these impairments.

The good housekeeping practices, preventative maintenance and Best Management Practices implemented at the facility are methods to limit potential negative impacts to stormwater. These practices are discussed in **SECTION 3** of this SWPPP.

2.7 Site Activities

The following activities occur at the facility:

- Facility or Building Maintenance
- Fueling Operations
- Chemical unloading, handling, and storage (including paint, flammables,)
- Painting
- Sand storage
- Salt storage
- Solid waste management (including scrap metal)
- Tool storage
- Vehicle and equipment storage
- Vehicle and equipment maintenance/repair (including oil changes)
- Vehicle and equipment washing
- Waste Handling and Disposal
- Waste oil storage.

Below is a discussion of site activities and the potential pollutant sources associated with each, as well as measures taken to minimize pollution. Locations of each activity are shown on the Site Plan (**Figure 2-2**).

The Highway Department does not store hazardous materials other than those noted previously, and no obsolete vehicles or other potential sources of pollutants are kept in any structure at the Highway Department.

No solvent-based parts washers were observed in any structure at the MHD. Any hazardous materials are either collected by a third party vendor contracted by the MHD on a regular basis, or collected at the annual Household Hazardous Waste Day (HHHD) that is hosted for the benefit of Monson residents. Waste materials from Highway Department operations that may be collected at the annual HHHW Day include used motor vehicle fluids such as used antifreeze and brake fluid. Any oil that may be contaminated with antifreeze, brake fluid, paint, or other additive is also collected on the HHHW Day. These materials are properly labeled and stored using appropriate Best Management Practices between the time of generation and disposal.

The department does not apply or utilize fertilizers, herbicides, or pesticides at any facility owned or managed by the MHD. As such, no fertilizers, herbicides, or pesticides are stored at the MHD.

2.7.1 Compost Production or Storage

There is no compost production or storage at the MHD.

2.7.2 Stockpiles and Sand Storage

Potential Sources of Stormwater Pollution

Sand stored in piles for use during construction and during winter plowing and deicing activities represents a potential source to stormwater pollution. Stockpiled materials such as gravel, loam, and crushed rock represent a similar source of pollution. When stored unprotected outdoors, sand piles and material stockpiles are exposed to precipitation. When the resulting eroded material enters the stormwater system, the sediment can quickly fill the sumps of catch basin structures, rendering them ineffective.

Mixing sand and salt for use in deicing activities poses an additional element of stormwater pollution, particularly if the mixing area is not fully enclosed and protected from the elements.

Pollution Prevention

To avoid contamination of stormwater by sand and other stockpiled materials, erosion and sediment control measures should be implemented at each storage site. If the stockpile location becomes a permanent storage site for sand, a roofed structure should be considered to reduce erosion.

Sediment barriers should be placed around the perimeter of the storage site to prevent any runoff carrying sand from entering storm drains and surface waters. If the weather becomes dry and windy, regular light watering of the stockpile and surrounding area will provide effective dust control. Please refer to SOP 6, “Erosion and Sedimentation Control,” included in **Appendix A**, for more information.

Sand that has been mixed with salt for use during winter plowing and deicing activities should always be stored in an enclosed and covered salt shed. Salt sheds should be constructed on level ground with an impervious base on which to store the salt/sand mixture. Under no circumstances should loose salt/sand mix be stored outside and unprotected. All mixing of salt and sand should take place within the salt shed or other covered, enclosed area. It is recommended the Town of Monson consider implement a solution to protect the current open-air sand/salt pile on site as to comply with pollution prevention regulations. At a minimum, a sediment barrier (silt fence, filter sock) should be installed surrounding the existing sand pile.

Ensuring that the storage area is regularly swept and kept clean is an important good housekeeping practice.

2.7.3 Salt Storage

Potential Sources of Stormwater Pollution

Salt stored in piles for use during winter plowing and deicing operations represents a potential major contributor to stormwater pollution. When stored unprotected outdoors, salt is exposed to precipitation, causing leachate with high chloride that can be discharged to the receiving water. Salt delivery and loading activities can contribute pollutants to stormwater if the material is not handled with care, and if spills from handling operations are not promptly cleaned up.

Pollution Prevention

To prevent stormwater pollution, all salt piles should be enclosed and covered in sheds to prevent exposure to precipitation. Salt sheds should be constructed on level ground with an impervious base on which to store the salt. The shed should prevent disturbance or migration of the salt by wind.

2.7.4 Solid Waste Management

Potential Sources of Stormwater Pollution

Solid waste production and storage locations present the threat to contaminate stormwater with pathogens, including bacteria and viruses, nutrients, including phosphorus and nitrogen, metals and sediments.

Solid waste may be classified as both hazardous and non-hazardous waste consisting of agricultural, construction and demolition, dead animals, industrial, municipal, and tire waste.

Pollution Prevention

To prevent or reduce the potential for stormwater pollution from solid waste management practices the following preventative maintenance procedures are recommended:

1. All staff shall be properly trained in correct solid waste management practices, including waste disposal and spill prevention and response. All employees shall also be knowledge of the potential hazards associated with solid waste handling and storage.
2. Each waste storage location shall be properly labeled and all significant sources of pollution shall be kept in a secure, covered and contained area.
3. The facility and storage containers shall remain locked at all times other than during normal hours of operation.
4. All waste storage containers and waste handling equipment shall be routinely inspected for signs of spills, leaks, corrosion or general deterioration.
5. The facility shall maintain spill response materials in accordance with SOP 4, “Spill Response and Cleanup”.

2.7.5 Snow Dump

This section is not applicable for the MHD facility.

2.7.6 Vehicle and Equipment Storage

Potential Sources of Stormwater Pollution

Vehicle and equipment storage activities are a potential source of pollution due to the diesel fuel, gasoline, oil, hydraulic fluid, antifreeze and similar hazardous material or fuel the machinery may contain. In addition, vehicles or machinery may pick up pollutants during the course of offsite activities or at other facilities, and then deposit these pollutants at the storage facility.

Pollution Prevention

Regular visual inspection and maintenance of vehicles and equipment can greatly reduce the potential for pollution by finding and addressing leaks before pollution of the environment occurs. When in storage, vehicles and equipment should be kept on a covered slab or within a building with a common drain. Discharge to this drain shall be managed by an oil/ water separator to remove oils and gasoline. Vehicle washing activities shall not be completed in areas served by an oil/water separator.

2.7.7 Vehicle and Equipment Maintenance/Repair

Potential Sources of Stormwater Pollution

Vehicle and equipment maintenance and repair often requires the use of harmful liquids such as fuels, oils, and lubricants, and has the potential for producing dust, scrap and by-products that may contain pollutants. Both accidental and purposeful spillage, i.e., a leaky oil pan needing repair vs. draining the pan during an oil change, can lead to situations where pollutants can potentially enter stormwater runoff if the situations are not approached properly. Although there is little potential for effecting stormwater, it should be noted that hazardous gases can be produced during maintenance and repair as well.

Pollution Prevention

Proper maintenance and repair for vehicles and equipment shall include a preliminary assessment of potential pollutant sources. This assessment shall be used to determine the best means of containing any potential spills or by-products of the situation at hand. Approved containers shall be used to capture hazardous liquids to then be disposed of according to applicable MassDEP and USEPA guidelines. If the project may produce hazardous dust that could come in contact and mix with any liquids, the proper containment shall be utilized.

Due to heavy metal accumulation in antifreeze, brake fluid, transmission fluid, and hydraulic oils, it is not recommended that any of these liquids are disposed of in the sanitary sewer system. Contaminated parts removed or replaced on any vehicles or equipment shall be disposed of properly.

All work shall take place on a covered slab or within a building with a common drain. Discharge to this drain shall be managed by an oil/ water separator to remove oils and gasoline.

2.7.8 Vehicle and Equipment Washing

Potential Sources of Stormwater Pollution

Vehicle and equipment washing activities are a potential source of pollution not only from petroleum products and pollutants deposited on the exterior of the equipment, but also from nutrients and sediment being washed into water bodies from the act of washing itself. Although some cleaning agents are becoming environmentally friendly, many still contain regulated contaminants. Due to the possibility for multiple types of pollutants, vehicle and equipment washing activities have a high potential for degrading stormwater quality.

Pollution Prevention

Outdoors, the use of a tight tank or other similar structure that can contain the wash water is ideal. If the wash water cannot be contained, it shall not be allowed to directly enter water bodies. Use phosphate free detergents that do not contain regulated contaminants, and avoid using solvents where the wash water may enter a sanitary sewer. Impervious surfaces may be used to promote infiltration and treatment before wash water enters the groundwater, but wash water coming from impervious pavement shall be treated to remove nutrients and petroleum products before entering an engineered storm drain system. Infiltration shall not be used within wellhead protection areas or other protected resource areas. Power washing, steam cleaning and engine and undercarriage washing shall not occur outdoors. Heavily soiled or vehicle dirtied from salting shall not be washed outdoors. All debris and particulate accumulation shall be removed and swept clean in all outdoor washing areas.

Washing vehicles and equipment indoors in the proper facilities is preferred over washing outdoors whenever possible. Indoor facilities shall have a common drain and it shall utilize a tight tank or other containment device to hold the wash water. The use of detergents shall be avoided and when the use of detergents cannot be avoided, use detergents free from phosphates and regulated contaminants. Detergents shall not be used when the discharge of this drain is controlled by an oil/ water separator Dry clean-up methods such as vacuuming and sweeping shall be used whenever possible to avoid washing down floors with water.

For both outdoor and indoor washing, maintain absorbent pads and drip pans to collect spills and leaks observed during washing activities. Refer to SOP 4, “Spill Response and Cleanup Procedures” included in **Appendix A** for more information.

Washing of all facility vehicles is completed in northwest portion of the main building at the MHD. Wastewater from vehicle washing operations inside the building discharge to an oil/water separator that is maintained by the MHD and pumped out on a regular basis as needed by a third party.

Salt and sand spreaders stored at the main building are occasionally pressure washed at that location.

2.7.9 Waste Handling and Disposal

Potential Sources of Stormwater Pollution

Waste handling and disposal facilities and activities present a potential to contaminate stormwater with pathogens (including bacteria and viruses), nutrients, including phosphorus and nitrogen, and sediments.

There are several classifications of waste which contribute to stormwater pollution, including:

1. Solid Waste
2. Hazardous Materials and Waste
3. Petroleum Products
4. Detergents

Pollution Prevention

A variety of measures are considered appropriate to prevent pollution from waste handling and disposal activities, based on the waste classifications noted previously.

Solid Waste

1. Designate a waste collection area on the site that does not receive a substantial amount of runoff from upland areas and does not drain directly to a receiving water.
2. Ensure that containers have lids so they can be covered before periods of rain, and keep containers in a covered area whenever possible.
3. Schedule waste collection to prevent the containers from overfilling.
4. Clean up spills immediately and in accordance with SOP 4, “Spill Response and Cleanup Procedures” included in Appendix A.

Hazardous Materials and Wastes

1. To prevent leaks, empty and clean hazardous waste containers before disposing of them.
2. Never remove the original product label from the container. Follow the manufacturer's recommended method of disposal, printed on the label.
3. Never mix excess products when disposing of them, unless specifically recommended by the manufacturer.
4. Clean up spills immediately and in accordance with SOP 4 “Spill Response and Cleanup”.

Detergents

1. Never dump wastes containing detergents to a storm drain system. All wastes containing detergents shall be directed to a sanitary sewer system for treatment at a wastewater treatment plant.

In addition to the pollution prevention requirements a waste management plan is recommended. The plan shall include employee training and signage informing individuals of the hazards associated with improper storage, handling and disposal of wastes. It is imperative that all employees are properly trained and follow the correct procedures to reduce or eliminate stormwater pollution. Routine visual inspection of storage and use areas is critical. The visual inspection process shall include identification of containers or equipment which could malfunction and cause leaks or spills. The equipment and containers shall be inspected for the following:

1. Leaks
2. Corrosion
3. Support or Foundation Failure
4. Other Deterioration

In the case a defect is found, immediately repair or replace.

2.7.10 Waste Oil Storage

Potential Sources of Stormwater Pollution

When not stored properly, waste oil can be a potential source of petroleum in stormwater. Waste oil containers can leak, and spills can occur while during transportation activities.

Pollution Prevention

All waste oil containers should be properly labeled and stored with secondary containment. Containers should be regularly inspected for rust, leaks, or other signs of deterioration. Defective containers should be promptly removed and replaced. A spill response kit should be located wherever waste oil is

stored. Facility personnel should know where the spill kit is located and be familiar with the procedures outlined in SOP 4 “Spill Response and Cleanup Procedures” in **Appendix A**. Used oil filters should also be properly disposed.

Care should be taken when transferring used oil to and from storage containers. For additional information see SOP 7 “Fuel and Oil Handling Procedures” found in **Appendix A**.

Waste oil should be stored indoors or under a covered structure to prevent exposure to precipitation. Floor drain in waste oil storage areas should drain to an oil/water separator rather than the storm drain system.

When possible, steps should be taken to recycle waste oil or reduce the amount generated.

2.8 Allowable Non-Stormwater Discharges

A non-stormwater discharge is defined as any discharge or flow to the engineered storm drain system that is not composed entirely of stormwater runoff.

Allowable non-stormwater discharges that occur at this facility include:

- Residential building wash waters without detergents.

It has been determined that the above non-stormwater discharges at the facility do not represent a significant contribution of pollution to the MS4 or the waters of the United States. Therefore, these are considered to be authorized under the current MS4 permit.

2.9 Applicability of Spill Prevention, Control and Countermeasure (SPCC) Requirements

Under federal regulations 40 CFR Part 112 (and Amendments), a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required when a facility has an aboveground oil storage capacity greater than 1,320 gallons, when including containers with a capacity of 55 gallons or more. The Highway Department does not have aboveground oil storage capacity that exceeds 1,320 gallons.

2.10 Description of Significant Material Storage Areas

Many activities at the facility which involve materials such as chemicals, washer fluids, vehicle fluids, oils, etc. occur within contained garages or bays. These activities may include minor equipment/vehicle repair, oil changes, repainting, lubrication, and parts replacement.

Fueling of all Town owned vehicles occurs at the Fuel Island located at the northwest portion of the property on the backside of the main building. All bulk delivery of fuel to the Fuel Island is monitored by a Monson employee.

The Highway Department emergency generator is fueled with diesel fuel approximately every two years. The fuel is delivered to the storage tank which is located within the main building. All bulk delivery of fuel to the emergency generator is monitored by a Monson employee.

Waste oil and other used motor fluids are stored in the main building. Waste oil is stored in tanks and drums also located within the main building, all of which have internal containment or are located on appropriate containment pallets.

Chemicals, including Blue Magic for vehicle washing, are used at the Highway Department. Other chemicals include vehicle maintenance oils, grease, paints, glues, and general cleaning materials. These chemicals are stored within the main building and fully contained. Delivery of all chemicals is monitored by a Highway Department employee.

Within the salt shed, deicing materials including road salt are stored. Delivery of deicing materials to the salt shed is monitored by a Highway Department employee.

2.11 List of Significant Leaks or Spills

No significant leaks or spills have occurred in the last three years at the Highway Department.

Forms included in **Appendix B** will be used to document any spill or leak that occurs at the facility in the future.

2.12 Structural BMPs

Structural BMPs include onsite constructed systems that provide pretreatment or treatment of stormwater flows. The following structural BMPs are presently used at the Highway Department to maintain water quality.

2.12.1 Pretreatment Structural BMPs

- Oil/water Separators
- Vegetated Filter strip

2.13 Sediment and Erosion Control

Site topography at the Highway Department prevents drainage of stormwater and any associated sedimentation from discharging directly to a water body.

SECTION 3 – Non-Structural Controls

3.1 Good Housekeeping

Good housekeeping practices are activities, often conducted daily, that help maintain a clean facility and prevent stormwater pollution problems. The following is a list of good housekeeping measures that are practiced at the facility:

- All washing of vehicles is performed within the designated vehicle wash bay.
- All fluid products and wastes are kept indoors.
- Fueling of small equipment is completed indoors.
- All floor drains present within garage bays drain to an oil/water separator.
- Spill materials and cleanup kits are maintained at all locations where oil materials are used, stored, or may be present, including at Fuel Islands.
- Used spill cleanup materials are disposed of properly.
- Materials are stored indoors or in covered areas to minimize exposure to stormwater.
- No fertilizers, herbicides, or pesticides are stored or used at the facility.
- Hazardous materials storage lockers with spill containment are used. Storage areas are located away from vehicle and equipment paths to reduce the potential of accident related leaks and spills.
- Storage drums and containers are not located close to storm drain inlets.
- All hazardous material storage areas and containers have proper signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment.
- All materials, waste oil storage containers, and gas cans are properly labeled.
- Oil/water separators and catch basins are maintained regularly and properly.
- Spill kits are located in areas where fluids are stored or where activities may result in a spill.
- Tools and materials are returned to designated storage areas after use.
- Waste materials are properly collected and disposed of.
- Different types of wastes are separated as appropriate.
- Regular waste disposal is arranged.
- Work areas are clean and organized.
- Work areas are regularly swept or vacuumed to collect metal, wood, and other particulates and materials.
- Obtain only the amount of materials required to complete a job.
- Materials are recycled when possible.
- Staff is familiar with manufacturer directions for proper use of materials and associated Safety Data Sheets (SDSs).
- Staff is familiar with proper use of equipment.
- Bollards, berms, and containment features are in place around areas and structures where fluids are stored.
- Drip pans are used for maintenance operations involving fluids and under leaking vehicles and equipment waiting repair.

The facility maintains a supply of spill cleanup materials at many buildings on site, and will maintain this inventory.

3.2 Preventative Maintenance

Preventative Maintenance can minimize the occurrence of stormwater pollution by addressing issues before they become problems. Vehicles and equipment should be regularly inspected to prevent leaks of fuel, oil, and other liquids. Structural stormwater controls should be regularly maintained to prevent inadequate performance during storm events.

The following is a list of preventative maintenance procedures practiced at the facility

- All staff members are aware of spill prevention and response procedures.
- All staff members have received formal spill prevention and response procedure training.
- All equipment fueling procedures are completed by qualified personnel trained in spill response procedures.
- Hydraulic equipment is kept in good repair to prevent leaks.
- Vehicle storage areas are inspected frequently for evidence of leaking oil.
- Material storage tanks and containers are regularly inspected for leaks.
- All material and bulk deliveries are monitored by facility employees.

3.3 Best Management Practices

In a SWPPP, existing and planned BMPs are identified that will prevent or reduce the discharge of pollutants in stormwater runoff for each area of concern listed in **SECTION 2**.

To prevent or reduce the potential of stormwater contamination from petroleum products, the following BMPs shall continue to be followed:

1. Follow Standard Operating Procedures (s) during delivery of waste oil to the equipment/waste oil storage bay. These SOPs are included in Appendix A.
2. Follow Standard Operating Procedures during delivery of bulk oil to the emergency generator and bulk fuel to the Fuel Island. These SOPs are included in Appendix A.
3. Minimize the volume of gasoline stored within the buildings and on the site.
4. Clean up any oil spills observed in the parking lot, garages, or other surfaces in a timely manner.
5. Monitor all material deliveries.
6. Inspect all storage tanks prior to filling activities for spills, leaks and corrosion.

3.4 Spill Prevention and Response

The following procedures apply to the facility:

- All personnel are instructed in location, use, and disposal of spill response equipment and supplies maintained at the site such as oil absorbent materials.
- The Pollution Prevention Team leader will be advised immediately of all spills of hazardous materials or regulated materials, regardless of quantity.
- Spills will be evaluated to determine the necessary response. If there is a health hazard, fire or explosion potential, 911 will be called. If a spill exceeds five gallons or threatens surface waters, including the storm drain system, state or federal emergency response agencies will be called.
- Spills will be contained as close to the source as possible with oil-absorbent materials. Additional materials or oil-absorbent socks will be utilized to protect adjacent catch basins.

SECTION 4 – Plan Implementation

4.1 Employee Training

Regular employee training is required for employees who work in areas where materials or activities are exposed to stormwater, or who are responsible for implementing activities identified in the SWPPP, including all members of the Pollution Prevention Team.

The Highway Department is responsible for stormwater management training for Highway Department employees. This position coordinates training related to stormwater management on at least an annual basis to review specific responsibilities for implementing this SWPPP, what and how to accomplish those responsibilities, including BMP implementation.

Additionally, general awareness training is provided regularly (preferably annually) to all employees whose actives may impact stormwater discharges. The purpose of this training is to educate workers on activities that can impact stormwater discharges and to help implement BMPs.

All employees responsible for the fueling or lubrication of vehicles or equipment stored at the facility will be trained regularly (preferably annually). The topics below will be covered at employee training sessions.

1. Spill prevention and response.
2. Good housekeeping.
3. Materials management practices.

Pollution Prevention Team members will meet at least twice a year to discuss the effectiveness of and improvement to the SWPPP. **Appendix C** contains copies of training documentation from these training activities including attendance sheets, instructor name and affiliation, date, time, and location of the training.

4.2 Site Inspection Requirements

It is required that the entire MHD facility be inspected at least once each calendar quarter when the facility is in operation (at least one inspection must be conducted during a period when stormwater discharge is occurring). John Morrell or Ben Murphy are responsible for completing this inspection.

The inspection must check for evidence of pollution, evaluate non-structural controls in place at the site, and inspect equipment. The site inspection report must include:

- The inspection date and time
- The name of the inspector
- Weather information and a description of any discharge occurring at the time of the inspection
- Identification of any previously unidentified discharges from the site
- Any control measures needing maintenance or repair
- Any failed control measures that need replacement
- Any SWPPP changes required as a result of the inspection
- Signed certification statement.

The inspection form for these inspections, and copies of completed inspection forms, are included in **Appendix D**.

Corrective actions may be required based on evidence of past stormwater pollution or the high potential for future stormwater pollution to occur. Information about any issues and the respective corrective actions must be included in a Compliance Evaluation report. The permittee must repair or replace control measures in need of repair or replacement before the next anticipated storm event if possible, or as soon as practicable. In the interim, the permittee shall have back-up measures in place. The Compliance Evaluation report must be kept with the SWPPP and must state the problem, the solution, and when the solution was implemented.

4.3 Recordkeeping and Reporting

The permittee must keep a written record (hardcopy or electronic) of all activities required by the SWPPP including but not limited to maintenance, inspections, and training for a period of at least five years.

This SWPPP shall be kept at the Highway Department administrative office, and shall be updated if any of the conditions described in **SECTION 2** change. The SWPPP and records shall be made available to state or federal inspectors and the general public upon request.

The 2016 Massachusetts MS4 Permit requires that each permittee report on the findings from Site Inspections in the annual report to USEPA and MassDEP.

Inspections of the MHD facility should be performed at least quarterly (at least one during stormwater discharge) and described in the Annual Report, including any corrective actions taken, to demonstrate that operation of the MHD facility is in compliance with the 2016 Massachusetts MS4 Permit.

4.4 Triggers for SWPPP Revisions

Monson shall review this SWPPP regularly to determine if any update or revision is required. Changes that may trigger revision include:

- An increase in the quantity of any potential pollutant stored at the facility;
- The addition of any new potential pollutant (not already addressed in this SWPPP) to the list of materials stored or used at the facility;
- Physical changes to the facility that expose any potential pollutant (not presently exposed) to stormwater;
- Presence of a new authorized non-stormwater discharge at the facility; or
- Addition of an activity that introduces a new potential pollutant.

Changes in activity may include an expansion of operations, or changes in any significant material handling or storage practices which could impact stormwater.

The amended SWPPP will describe the new activities that could contribute to increased pollution, as well as control measures that have been implemented to minimize the potential for pollution.

This SWPPP will be amended if a state or federal inspector determines that it is not effective in controlling stormwater pollutants discharged to waterways.

SECTION 5 – SWPPP Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official:_____

Title:_____

Date:_____

The SWPPP must be signed by a ranking elected official or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing;

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

3. The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

Appendix A

Standard Operating Procedures

SOP 4: Spill Response and Cleanup

Introduction

Municipalities are responsible for any contaminant spill or release that occurs on property that they own or operate. Particular areas of concern include any facilities that use or store chemicals, fuel oil, or hazardous waste, including schools, garages, and landfills. Implementation of proper spill response and cleanup procedures can help to mitigate the effects of a contaminant release. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to help reduce the discharge of pollutants from the MS4 as a result of spills or releases.

The Monson Highway Department (MHD) undertakes various precautions with spill response and cleanup procedures. The MHD facility is equipped with spill containment platforms under all containers that are 55-gallon drums or larger in order to catch any hazardous liquids that have the potential to leak such as used/unused oil. In the event of a spill or leak, depending on magnitude, the Pollution Prevention Officer will be notified, and the Monson Fire Department will be called. Drip pans or other containment vessels will be utilized to contain spill materials and relocate to a safe destination. The origin of the leak will be assessed and stopped, while the spilled material is cleaned up and disposed in the appropriate manner in accordance with local, state, and federal regulations.

Employees of the MHD are trained annually on spill pollution prevention in the form of spill response procedures.

Procedures

The MHD will implement the following spill response and cleanup procedures to reduce the discharge of pollutants from the MS4:

Responding to a Spill

Employees should be trained in proper spill response specific to the materials used at their site and appropriate personal protective equipment (PPE). In the event of a spill, follow these spill response and cleanup procedures:

- A member of the facility's Pollution Prevention Team, the facility supervisor, and/or the facility safety officer will be notified. Spill response action should include the procedures summarized below.
- Assess the contaminant release site for potential safety issues and for direction of flow.
- Complete the following:
    - Stop the contaminant release.
    - Contain the contaminant release through the use of spill containment berms or absorbents.
    - Protect all drains and/or catch basins with the use of absorbents, booms, berms or drain covers.
    - Clean up the spill.

- Dispose of all contaminated products in accordance with applicable federal, state and local regulations.
    i. Soil contaminated with petroleum should be handled and disposed of as described in MassDEP policy WCS-94-400, Interim Remediation Waste Management Policy for Petroleum Contaminated Soils (https://www.mass.gov/files/documents/2016/08/mq/94-400.pdf).
    ii. Products saturated with petroleum products or other hazardous chemicals require special handling and disposal by licensed transporters. Licensed transporters will pick up spill contaminated materials for recycling or disposal. Save the shipping records for at least three years.
    iii. Waste oil contaminated industrial wipes and sorptive minerals:
        1. Perform the "one drop" test to ensure absorbents do not contain enough oil to be considered hazardous, as described in the MassDEP Waste Oil Management Guide (https://www.mass.gov/files/documents/2018/12/18/oilwiper.pdf).
        2. Wring absorbents through a paint filter. If doing so does not generate one drop of oil, the materials are not hazardous.
        3. If absorbents pass the "one drop" test they may be discarded in the trash unless contaminated with another hazardous waste.
            a. It is acceptable to mix the following fluids and handle them as waste oil:
                i. Waste motor oil
                ii. Hydraulic fluid
                iii. Power steering fluid
                iv. Transmission fluid
                v. Brake fluid
                vi. Gear oil
            b. **Do not mix** the following materials with waste oil. Store each separately:
                i. Gasoline
                ii. Antifreeze
                iii. Brake and carburetor cleaners
                iv. Cleaning solvents
                v. Other hazardous wastes
        4. If absorbents do not pass the "one drop" test they should be placed in separate metal containers with tight fitting lids, labeled "Oily Waste Absorbents Only."

- If you need assistance containing and/or cleaning up the spill, or preventing it from discharging to a surface water (or an engineered storm drain system), contact your local fire department using the number listed below. **In the case of an emergency call 911**.
    - MONSON FIRE DEPARTMENT: (413) 267-3132
- Contact the MassDEP 24-hour spill reporting notification line, toll-free at **(888)-304-1133**;
    - The following scenarios **are exempt** from MassDEP reporting requirements (see the MassDEP factsheet on oil and hazardous materials handling for more

information: https://www.mass.gov/files/documents/2016/08/xm/spillmgm.pdf).

i. Spills that are less than 10 gallons of petroleum and do not impact a water body
ii. Spills that are less than one pound of hazardous chemicals and do not present an imminent health or safety hazard
iii. Fuel spills from passenger vehicle accidents
iv. Spills within a vault or building with a watertight floor and walls that completely contain all released chemicals

Reporting a Spill

When contacting emergency response personnel or a regulatory agency, or when reporting the contaminant release, be prepared to provide the following information:

1. Your name and the phone number you are calling from.
2. The exact address and location of the contaminant release.
3. Specifics of release, including:
    a. What was released;
    b. How much was released, which may include:
        i. Pounds
        ii. Gallons
        iii. Number of containers
4. Where was the release sent/what was contaminated, addressing:
    a. Pavement
    b. Soil
    c. Drains
    d. Catch basins
    e. Water bodies
    f. Public streets
    g. Public sidewalks
5. The concentration of the released contaminant.
6. What/who caused the release.
7. Is the release being contained and/or cleaned up or is the response complete.
8. Type and amount of petroleum stored on site, if any.
9. Characteristics of contaminant container, including:
    a. Tanks
    b. Pipes
    c. Valves

Maintenance and Prevention Guidance

Prevention of spills is preferable to even the best response and cleanup. To mitigate the effects of a contaminant release, provide proper maintenance and inspection at each facility. To protect against contaminant release adhere to the following guidance:

- Ensure all employees are properly trained to respond in the case of a spill, understand the nature and properties of the contaminant, and understand the spill control materials and personnel safety equipment. Maintain training records of current personnel on site

and retain training records of former personnel for at least three years from the date last worked at the facility.

- Provide yearly maintenance and inspection at all municipal facilities, paying particular attention to underground storage tanks. Maintain maintenance and inspection records on site.
- Implement good management practices where chemicals and hazardous wastes are stored:
    a. Ensure storage in closed containers inside a building and on an impervious surface wherever possible.
    b. If storage cannot be provided inside, ensure secondary containment for 110 percent of the maximum volume of the storage container.
    c. Locate storage areas near maintenance areas to decrease the distance required for transfer.
    d. Provide accurate labels, Material Safety Data Sheets (MSDS) information, and warnings for all stored materials.
    e. Regularly inspect storage areas for leaks.
    f. Ensure secure storage locations, preventing access by untrained or unauthorized persons.
    g. Maintain accurate records of stored materials.
- Replace traditional hazardous materials such as pesticides and cleansers with non-hazardous products such as bio-lubricants which can reduce response costs in the case of a spill.

Maintain appropriately stocked spill response kits at each facilities and locations where oil, chemicals, or other hazardous materials are handled and stored.

Employee Training

- Employees who perform work with potential stormwater pollutants annually on proper spill procedures.
- Employees are also trained on stormwater pollution prevention and illicit discharge detection and elimination (IDDE) procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Attachments

1. Spill Response and Cleanup Contact List

SOP 7: Fuel and Oil Handling

Introduction

Spills, leaks, and overfilling can occur during handling of fuels and petroleum-based materials, representing a potential source of stormwater pollution, even in small volumes. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees on a variety of ways by which fuels and petroleum-based materials can be delivered, as well as steps to be taken when petroleum products (such as waste oil) are loaded onto vehicles for offsite disposal or recycling. Delivery, unloading, and loading of waste oils are hereafter referred to as "handling." Attached is a fuel delivery form checklist.

The Monson Highway Department (MHD) undertakes various procedures and precautions in handling fuel and oil. Fuel and oil are delivered to and from the MHD facility by a third-party vendor, and monitored and inspected by staff trained in the spill prevention precautions listed in the following procedures.

Procedures

The MHD will implement the following fuel and oil handling procedures to help reduce the discharge of pollutants from the MS4:

General Guidelines

For all manners of fuel and oil handling described below, a member of the facility's Pollution Prevention Team or another knowledgeable person familiar with the facility should be present during handling procedures. This person should ensure that the following are observed:

- There is no smoking while fuel handling is in process or underway.
- Sources of flame are kept away while fuel handling is being completed. This includes smoking, lighting matches, carrying any flame, or carrying a lighted cigar, pipe, or cigarette.
- The delivery vehicle's hand brake is set and wheels are chocked while the activity is being completed.
- Catch basins and drain manholes are adequately protected.
- No tools are to be used that could damage fuel or oil containers or the delivery vehicle.
- No flammable liquid should be unloaded from any motor vehicle while the engine is operating, unless the engine of the motor vehicle is required to be used for the operation of a pump.
- Ensure that local traffic does not interfere with fuel transfer operations. If it does, make appropriate accommodations.
- The attending persons should watch for any leaks or spills:
    - Any small leaks or spills should be immediately stopped, and spilled materials absorbed and disposed of properly. Follow the procedures in SOP 4: Spill Response and Cleanup.
    - In the event of a large spill or one that discharges to surface waters or an engineered storm drain system, the facility representative should activate the

facility's Stormwater Pollution Prevention Plan (SWPPP) and report the incident as specified in the document.

Delivery by Bulk (Tanker) Truck

Procedures for the delivery of bulk fuel should include the following:

- The truck driver should check in with the facility upon arrival.
- The facility representative should ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP 4: Spill Response and Cleanup for examples of spill cleanup and response materials.
- The facility representative should check to ensure that the amount of delivery does not exceed the available capacity of the tank.
    - A level gauge can be used to verify the level in the tank.
    - If a level gauge is not functioning or is not present on the tank, the tank should be stick tested prior to filling.
- The truck driver and the facility representative should both remain with the vehicle during the delivery process.
- The truck driver and the facility representative should inspect all visible lines, connections, and valves for leaks.
- When delivery is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
- The delivery vehicle should be inspected prior to departure to ensure that the hose is disconnected from the tank.
- The facility representative should inspect the fuel tank to verify that no leaks have occurred, or that any leaked or spilled material has been cleaned and disposed of properly.
- The facility representative should gauge tank levels to ensure that the proper amount of fuel is delivered, and collect a receipt from the truck driver.

Delivery of Drummed Materials

Drummed materials may include motor oil, hydraulic fluid, transmission fluid, or waste oil from another facility (as approved). Procedures for the delivery of drummed materials should include the following:

- The truck driver should check in with the facility upon arrival.
- The facility representative should ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible Refer to SOP 4: Spill Response and Cleanup for examples of spill cleanup and response materials. The facility representative should closely examine the shipment for damaged drums.
    - If damaged drums are found, they should be closely inspected for leaks or punctures.
    - Breached drums should be removed to a dry, well-ventilated area and the contents transferred to other suitable containers.
    - Drums should be disposed of in accordance with all applicable regulations.
- Drummed materials should not be unloaded outdoors during wet weather events.

- The truck driver and the facility representative should both remain with the vehicle during the delivery process.
- Drums should be handled and unloaded carefully to prevent damage.
- Upon completion of unloading, the facility representative should inspect the unloading point and the drums to verify that no leaks have occurred, that any leaked or spilled material has been cleaned up and disposed of properly, and that the unloaded drums are not leaking.
- The facility representative should check to ensure that the proper amount of fuel or other material is delivered, and collect a receipt from the truck driver.

Removal of Waste Oil from the Facility

When waste oil or similar oil products need to be removed from the premises, only haulers certified to transport waste oil should be utilized. Procedures should include the following:

- The disposal truck driver should check in with the facility upon arrival.
- The facility representative should ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP 4: Spill Response and Cleanup for examples of spill cleanup and response materials. The truck driver and the facility representative should both remain with the vehicle during the tank draining process.
- When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.
- The facility representative should inspect the loading point and the tank to verify that no leaks have occurred, or that any leaked or spilled material has been cleaned up and disposed of properly.
- The facility representative should collect a receipt from the truck driver.
- When draining bulk oil tanks:
    - The facility representative should verify that the volume of waste oil in the tank does not exceed the available capacity of the disposal hauler's vehicle.
    - The disposal hauler vehicle should be inspected prior to departure to ensure that the hose is disconnected from the tank.

Employee Training

- Employees who handle or deliver fuel and/or oil are trained annually on proper procedures.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Attachments

1. Fuel Delivery Checklist

Related Standard Operating Procedures

- SOP 4: Spill Response and Cleanup

SOP 17: Hazardous Materials Storage and Handling

Introduction

A hazardous material is any biological, chemical, or physical material with properties that make it dangerous or potentially harmful to human health or the environment. Hazardous materials can be released to the environment in a variety of ways. When hazardous materials come into contact with rain or snow, the pollutants are washed into the storm sewer system and to surface waterbodies and/or groundwater. Hazardous materials associated with municipal facilities and their operations include, but are not limited to, oil, gasoline, antifreeze, fertilizers, pesticides, and de-icing agents and additives.

Minimizing or eliminating contact of hazardous materials with stormwater can significantly reduce pollution of receiving waters. Proper hazardous material handling and storage also contributes to employee health, an organized workplace, and efficient operations. The goal of this written Standard Operating Procedure (SOP) is to provide guidance to municipal employees to help prevent stormwater pollution resulting from the handling and storage of hazardous materials. If services are contracted, this SOP should be provided to the contractor. The contract should also specify that the contractor is responsible for compliance with all applicable laws.

The Monson Highway Department (MHD) undertakes various activities in regard to handling and storing hazardous materials. Flammable materials are stored in a separate yellow cabinet marked to indicate the storage of flammable materials. Fuel and waste oil are stored on spill prevention platforms. In the event of a spill or leak from facility equipment, spill prevention procedures will be followed. The MHD facility is equipped with a floor drain, running horizontally through the building, which discharges to an oil/water separator. This waste, as well as any other hazardous waste on site, is disposed of by a third-party contractor.

Procedures

The MHD will implement the following procedures for handling and storing hazardous materials to reduce the discharge of pollutants to the MS4:

Handling, Loading, and Unloading

- Avoid loading/unloading materials in the rain and/or provide cover.
- Retrace areas where materials have been transferred to identify spills. If spills are found, immediately clean them up. Follow procedures in SOP 4: Spill Response and Cleanup.
- Time delivery and handling of materials during favorable weather conditions whenever possible (e.g., avoid receiving loads of sand during windy weather).
- Inspect containers for material compatibility and structural integrity prior to loading/unloading any raw or waste materials.
- Use dry cleanup methods (e.g., squeegee and dust pan, sweeping, and absorbents as last step) rather than hosing down surfaces.

Material Storage

- Confine material storage indoors whenever possible. Plug or disconnect floor drains that lead to the stormwater system.
- Confine outdoor material storage to designated areas that are covered, on impervious surfaces, away from high traffic areas, and outside of drainage pathways.
- Store containers on pallets or equivalent structures to facilitate leak inspection and to prevent contact with wet floors that can cause corrosion. This technique also reduces incidences of container damage by insects and rodents.
- Store materials and waste in materially compatible containment units.
- Keep hazardous materials in their original containers.
- If materials are not in their original containers, clearly label all storage containers with the name of the chemical, the expiration date, and handling instructions.
- Maintain an inventory of all raw and waste materials to identify leakage. Order new materials only when needed.
- Provide secondary containment for storage tanks and drums with sufficient volume to store 110 percent of the volume of the material.
- Provide sufficient aisle space to allow for routine inspections and access for spill cleanup.
- Inspect storage areas for spills or leaks and containment units for corrosion or other failures.

Waste Treatment, Disposal, and Cleanup

- Adopt a regular schedule for the pick-up and disposal of waste materials.
- Recycle leftover materials whenever possible.
- Substitute nonhazardous or less-hazardous materials for hazardous materials whenever possible.
- Protect empty containers from exposure to stormwater and dispose of them regularly to avoid contamination from container residues.

Employee Training

- Employees who handle and use hazardous materials are trained annually on these procedures.
- Employees are also trained on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures.
- If services are contracted, the contractor should be given a copy of this and any applicable SOPs to ensure compliance with MS4 regulations.

Related Standard Operating Procedures

1. SOP 4: Spill Response and Cleanup

Appendix B

Spill Documentation Forms

Spill Response and Cleanup Contact List

Contact	Phone Number	Date and Time Contacted
Safety Officer: Ben Murphy	**(413) 335-7492**	
Facility Supervisor: John Morrell	**(413) 267-4135**	
Fire Department: Laurent McDonald	**(413) 267-3132**	
MassDEP 24-Hour Spill Reporting	**(888)-304-1133**	
MassDEP Regional Offices:		
Northeast Regional Office	**(978) 694-3200**	
Southeast Regional Office	**(508) 946-2700**	
Central Regional Office	**(508) 792-7650**	
Western Regional Office	**(413) 784-1100**	
Hazardous Waste Compliance Assistance Line	**(617) 292-5898**	
Household Hazardous Products Hotline	**(800) 343-3420**	
Massachusetts Department of Fire Services	**(978) 567-3100 or (413) 587-3181**	
Licensed Site Professionals Association (Wakefield, MA) Licensed Site Professionals Board	**(781) 876-8915 (617) 556-1091**	

FUEL DELIVERY FORM: TOWN OF MONSON

Date: _____

Time of Arrival: _____

Time of Departure: _____

Truck Number: _____

Name of Truck Driver: _____

Name of Town Employee: _____

BEFORE UNLOADING:

Is all spill response equipment and personal protective equipment in place?

Yes ☐ **No** ☐

In the case of bulk fuel delivery, does tank capacity exceed the amount of delivery?

Yes ☐ **No** ☐ **N/A** ☐

In the case of drum fuel delivery, are all drums free of leaks and punctures?

Yes ☐ **No** ☐ **N/A** ☐

COMMENCE UNLOADING. REMAIN WITH VEHICLE AT ALL TIMES.

AFTER UNLOADING IS COMPLETE:

Have all fuel containers, including the vehicle, been inspected for leaks?

Yes ☐ **No** ☐

Has the ground at the unloading point been inspected for evidence of leaks?

Yes ☐ **No** ☐

If there are any leaks or spills, has the material been properly cleaned?

Yes ☐ **No** ☐

Has the correct amount of fuel been delivered?

Yes ☐ **No** ☐

Has a receipt been collected?

Yes ☐ **No** ☐

DELIVERY IS COMPLETE.

Appendix C

Training Documentation and Attendance Sheets

Employee Training Log

Instructions:

- Keep records of employee training, including the date of the training.
- For in-person training, consider using the tables below to document your employee trainings. For computer-based or other types of training, keep similar records on who was trained and the type of training conducted.

Training Date:	
Training Description (including duration and subjects covered):	
Trainer:	
Employee(s) trained	**Employee signature**

Training Date:	
Training Description (including duration and subjects covered):	
Trainer:	
Employee(s) trained	**Employee signature**

Training Date:	
Training Description (including duration and subjects covered):	
Trainer:	
Employee(s) trained	**Employee signature**

Appendix D

Facility Inspection Form

Stormwater Site Inspection Report

General Information			
Facility Name			
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			

Weather Information

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snow ❑ High Winds
❑ Other: Temperature:

Have any previously unidentified discharges of pollutants occurred since the last inspection?
❑Yes ❑No
If yes, describe:

Are there any discharges occurring at the time of inspection? ❑Yes ❑No
If yes, describe:

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	Structural Control Measure	**Control Measure is Operating Effectively?**	**If No, In Need of Maintenance, Repair, or Replacement?**	**Corrective Action Needed and Notes** (identify needed maintenance and repairs, or any failed control measures that need replacement)
1		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
2		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
3		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
4		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
5		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
6		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
7		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
8		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
9		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
10		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

Areas of Materials or Activities exposed to stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	**Material loading/unloading and storage areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
2	**Equipment operations and maintenance areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
3	**Fueling areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
4	**Outdoor vehicle and equipment washing areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
5	**Waste handling and disposal areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
6	**Erodible areas/construction**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
7	**Non-stormwater/ illicit connections**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
8	**Salt storage piles or pile containing salt**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
9	**Dust generation and vehicle tracking**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
10	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
11	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
12	**(Other)**	❑Yes ❑No ❑ N/A	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures or changes to the SWPPP needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

Print inspector name and title: _____

Signature:_____**Date:**_____

Quarterly Visual Assessment Reports – additional form when stormwater discharge is occurring

Instructions:

- Include in your records copies of all quarterly visual assessment reports completed for the facility. An example quarterly visual assessment report can be found on the following page.
- At least one quarterly inspection per year must occur while stormwater is discharging.

Quarterly Visual Assessment Form– additional form when stormwater discharge is occurring

(Complete a separate form for each outfall you assess)

Name of Facility:

Outfall Name: "Substantially Identical Outfall"? ☐ Yes (identify substantially identical outfalls): ☐ No

Person(s)/Title(s) collecting sample:

Person(s)/Title(s) examining sample:

Date & Time Discharge Began (approx.): Date & Time Visual Sample Collected: Date & Time Visual Sample Examined:

Nature of Discharge: ☐ Rainfall ☐ Snowmelt

Parameter

Color ☐ None ☐ Other (describe):

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____ ☐ Solvents ☐ Other (describe):

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☐ No ☐ Yes (describe):

Settled Solids* ☐ No ☐ Yes (describe):

Suspended Solids ☐ No ☐ Yes (describe):

Foam (gently shake sample) ☐ No ☐ Yes (describe):

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick ☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☐ No ☐ Yes (describe):

* Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

A. Name: B. Title:

C. Signature: D. Date Signed:

Appendix E

Vehicle and Equipment Inventory